

QAZI, 12/07/05

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID: ~~120705~~

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	SEP 09	ACD predicted properties enhanced in REGISTRY/ZREGISTRY
NEWS	4	OCT 03	MATHDI removed from STN
NEWS	5	OCT 04	CA/CAPLUS-Canadian Intellectual Property Office (CIPO) added to core patent offices
NEWS	6	OCT 13	New CAS Information Use Policies Effective October 17, 2005
NEWS	7	OCT 17	STN(R) AnaVist(TM), Version 1.01, allows the export/download of CAPLUS documents for use in third-party analysis and visualization tools
NEWS	8	OCT 27	Free KWIC format extended in full-text databases
NEWS	9	OCT 27	DIOGENES content streamlined
NEWS	10	OCT 27	EPFULL enhanced with additional content
NEWS	11	NOV 14	CA/CAPLUS - Expanded coverage of German academic research
NEWS	12	NOV 30	REGISTRY/ZREGISTRY on STN(R) enhanced with experimental spectral property data
NEWS	13	DEC 05	CASREACT(R) - Over 10 million reactions available
NEWS EXPRESS			DECEMBER 02 CURRENT VERSION FOR WINDOWS IS V8.01, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 02 DECEMBER 2005. V8.0 USERS CAN OBTAIN THE UPGRADE TO V8.01 AT <a href="http://download.cas.org/express/v8.0-Discover/">http://download.cas.org/express/v8.0-Discover/</a>
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
NEWS INTER			General Internet Information
NEWS LOGIN			Welcome Banner and News Items
NEWS PHONE			Direct Dial and Telecommunication Network Access to STN
NEWS WWW			CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 14:52:09 ON 07 DEC 2005

10666175

QAZI, 12/07/05

=> FIL STNGUIDE  
COST IN U.S. DOLLARS

SINCE FILE ENTRY	TOTAL SESSION
0.21	0.21

FULL ESTIMATED COST

FILE 'STNGUIDE' ENTERED AT 14:52:15 ON 07 DEC 2005  
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT  
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE  
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: Dec 2, 2005 (20051202/UP).

=> FIL HOME  
COST IN U.S. DOLLARS

SINCE FILE ENTRY	TOTAL SESSION
0.06	0.27

FULL ESTIMATED COST

FILE 'HOME' ENTERED AT 14:52:23 ON 07 DEC 2005

=> file registry  
COST IN U.S. DOLLARS

SINCE FILE ENTRY	TOTAL SESSION
0.21	0.48

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 14:52:46 ON 07 DEC 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 6 DEC 2005 HIGHEST RN 869462-96-4  
DICTIONARY FILE UPDATES: 6 DEC 2005 HIGHEST RN 869462-96-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

\*\*\*\*\*  
\*  
\* The CA roles and document type information have been removed from \*  
\* the IDE default display format and the ED field has been added, \*  
\* effective March 20, 2005. A new display format, IDERL, is now \*  
\* available and contains the CA role and document type information. \*  
\*  
\*\*\*\*\*

Structure search iteration limits have been increased. See HELP SLIMITS  
for details.

REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

QAZI, 12/07/05

<http://www.cas.org/ONLINE/UG/regprops.html>

=> s 610785-51-8/rn

L1 1 610785-51-8/RN

=> d l1

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN

RN 610785-51-8 REGISTRY

ED Entered STN: 30 Oct 2003

CN Pregna-4,9(11)-diene-21-carboxylic acid, 7-[5-(1,1-dimethylethyl)-2-furanyl]-17-hydroxy-3-oxo-,  $\gamma$ -lactone, (7 $\alpha$ ,17 $\alpha$ )- (9CI)  
(CA INDEX NAME)

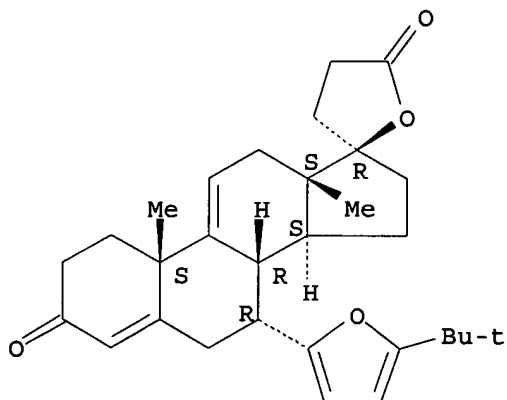
FS STEREOSEARCH

MF C30 H38 O4

SR CA

LC STN Files: CA, CAPLUS, CASREACT

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

2.70

3.18

FILE 'CAPLUS' ENTERED AT 14:53:46 ON 07 DEC 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

10666175

QAZI, 12/07/05

The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 7 Dec 2005 VOL 143 ISS 24  
FILE LAST UPDATED: 6 Dec 2005 (20051206/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s l1

L2 1 L1

=> d l1 ibib hitstr abs

YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:y

'IBIB' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'  
'HITSTR' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'  
'ABS' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

REG - RN  
SAM - Index Name, MF, and structure - no RN  
FIDE - All substance data, except sequence data  
IDE - FIDE, but only 50 names  
SQIDE - IDE, plus sequence data  
SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used  
SQD - Protein sequence data, includes RN  
SQD3 - Same as SQD, but 3-letter amino acid codes are used  
SQN - Protein sequence name information, includes RN  
  
CALC - Table of calculated properties  
EPROP - Table of experimental properties  
PROP - EPROP and CALC

Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats must be cited first. The CA File predefined formats are:

ABS -- Abstract  
APPS -- Application and Priority Information  
BIB -- CA Accession Number, plus Bibliographic Data  
CAN -- CA Accession Number  
CBIB -- CA Accession Number, plus Bibliographic Data (compressed)  
IND -- Index Data  
IPC -- International Patent Classification  
PATS -- PI, SO  
STD -- BIB, IPC, and NCL

10666175

QAZI, 12/07/05

IABS -- ABS, indented, with text labels  
IBIB -- BIB, indented, with text labels  
ISTD -- STD format, indented

OBIB ----- AN, plus Bibliographic Data (original)  
OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations  
SIBIB ----- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.

The MAX format is the same as ALL.

The IALL format is the same as ALL with BIB ABS and IND indented, with text labels.

For additional information, please consult the following help messages:

HELP DFIELDS -- To see a complete list of individual display fields.  
HELP FORMATS -- To see detailed descriptions of the predefined formats.  
ENTER DISPLAY FORMAT (IDE):o  
'O' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

REG - RN  
SAM - Index Name, MF, and structure - no RN  
FIDE - All substance data, except sequence data  
IDE - FIDE, but only 50 names  
SQIDE - IDE, plus sequence data  
SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used  
SQD - Protein sequence data, includes RN  
SQD3 - Same as SQD, but 3-letter amino acid codes are used  
SQN - Protein sequence name information, includes RN

CALC - Table of calculated properties  
EPROP - Table of experimental properties  
PROP - EPROP and CALC

Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats must be cited first. The CA File predefined formats are:

ABS -- Abstract  
APPS -- Application and Priority Information  
BIB -- CA Accession Number, plus Bibliographic Data  
CAN -- CA Accession Number  
CBIB -- CA Accession Number, plus Bibliographic Data (compressed)  
IND -- Index Data  
IPC -- International Patent Classification  
PATS -- PI, SO  
STD -- BIB, IPC, and NCL

IABS -- ABS, indented, with text labels

QAZI, 12/07/05

IBIB -- BIB, indented, with text labels  
ISTD -- STD format; indented

OBIB ----- AN, plus Bibliographic Data (original)  
OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations  
SIBIB ----- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.

The MAX format is the same as ALL.

The IALL format is the same as ALL with BIB ABS and IND indented, with text labels.

For additional information, please consult the following help messages:

HELP DFIELDs -- To see a complete list of individual display fields.  
HELP FORMATS -- To see detailed descriptions of the predefined formats.  
ENTER DISPLAY FORMAT (IDE):end

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.45	4.51

FILE 'CAPLUS' ENTERED AT 14:54:54 ON 07 DEC 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 7 Dec 2005 VOL 143 ISS 24  
FILE LAST UPDATED: 6 Dec 2005 (20051206/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s l1

L3 1 L1

=> d l1

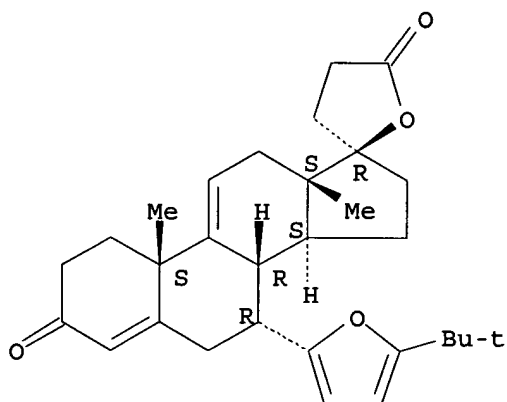
YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:y

10666175

QAZI, 12/07/05

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN  
RN 610785-51-8 REGISTRY  
ED Entered STN: 30 Oct 2003  
CN Pregna-4,9(11)-diene-21-carboxylic acid, 7-[5-(1,1-dimethylethyl)-2-furanyl]-17-hydroxy-3-oxo-,  $\gamma$ -lactone, (7 $\alpha$ ,17 $\alpha$ )- (9CI)  
(CA INDEX NAME)  
FS STEREOSEARCH  
MF C30 H38 O4  
SR CA  
LC STN Files: CA, CAPLUS, CASREACT

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d l3 ibib hitstr abs

L3 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2003:796726 CAPLUS  
DOCUMENT NUMBER: 139:307925  
TITLE: Process to prepare eplerenone and its intermediates  
from  $\Delta^9$ -canrenone and other pregnanes  
INVENTOR(S): Pearlman, Bruce Allen; Padilla, Amphlett Greg; Havens,  
Jeffrey L.; Mackey, Sonja S.; Wu, Haifeng  
PATENT ASSIGNEE(S): Pharmacia & Upjohn Company, USA  
SOURCE: PCT Int. Appl., 429 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003082895	A2	20031009	WO 2003-US7793	20030321
WO 2003082895	A3	20040422		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,				

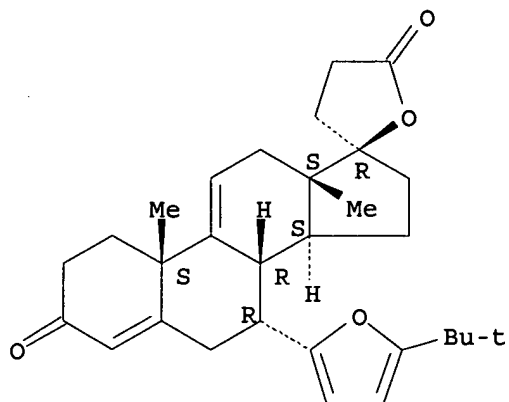
10666175

QAZI, 12/07/05

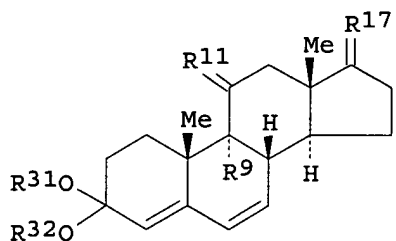
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,  
TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,  
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
CA 2474072 AA 20031009 CA 2003-2474072 20030321  
US 2003232981 A1 20031218 US 2003-392833 20030321  
US 2004024202 A1 20040205 US 2003-392857 20030321  
EP 1487859 A2 20041222 EP 2003-745535 20030321  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK  
BR 2003008466 A 20050426 BR 2003-8466 20030321  
JP 2005523306 T2 20050804 JP 2003-580359 20030321  
WO 2004037844 A1 20040506 WO 2003-US29923 20030919  
WO 2004037844 C1 20040610  
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,  
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,  
LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,  
OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,  
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
US 2004127702 A1 20040701 US 2003-666175 20030919  
EP 1539795 A1 20050615 EP 2003-774488 20030919  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK  
ZA 2004007607 A 20050701 ZA 2004-7607 20040921  
PRIORITY APPLN. INFO.: US 2002-366784P P 20020322  
US 2002-411874P P 20020919  
US 2002-425596P P 20021112  
US 2003-392833 A 20030321  
WO 2003-US7793 W 20030321  
WO 2003-US29923 W 20030919  
OTHER SOURCE(S): CASREACT 139:307925; MARPAT 139:307925  
IT 610785-51-8P  
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological  
study); PREP (Preparation); USES (Uses)  
(preparation of eplerenone and its intermediates from  $\Delta^9$ -canrenone and  
other pregnanes)  
RN 610785-51-8 CAPLUS  
CN Pregna-4,9(11)-diene-21-carboxylic acid, 7-[5-(1,1-dimethylethyl)-2-  
furanyl]-17-hydroxy-3-oxo-,  $\gamma$ -lactone, (7 $\alpha$ ,17 $\alpha$ )- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

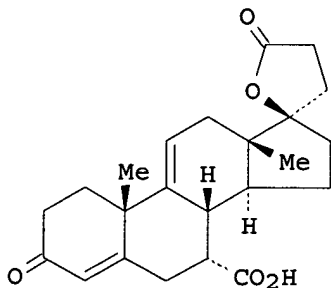




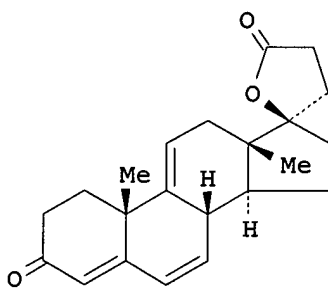
GI



I



II



III

AB The present invention involves novel intermediates I [R9 = H, OH, O-PG, F; PG = SiMe<sub>3</sub>, SiEt<sub>3</sub>, Ac, CHO; R11 = :O, H<sub>2</sub>, αR11-1βR11-2, R11-5R11-6; R11-1 = H, OR11-3; R11-2 = H, OR11-4; R11-3 = H, PG; R11-4 = H, PG; R11-5R9 = bond, R11-6 = H or R11-6R9 = bond, R11-5 = H; R11-7R9 = O; R11-8 = H; R17 = :O, αR17-1βR17-2, αR17-3βR17-4, αR17-5βR17-6, αR17-7βR17-8, OCH(OR17-9)CH<sub>2</sub>CH<sub>2</sub>, αR17-11βR17-12; R17-1 = H, C.tplbond.CH, CN, C.tplbond.CCH<sub>2</sub>αR17-1-1, C.tplbond.CCH<sub>2</sub>O-PG, CH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>-; R17-2 = OH; R17-3 = OH; R17-4 = COMe, COCH<sub>2</sub>OH, COCH<sub>2</sub>OC(:O)(CH<sub>2</sub>)<sub>0-3</sub>Me; R17-5R17-6 =

QAZI, 12/07/05

$\alpha$ -CH<sub>2</sub>O- $\beta$ ; R<sub>17-7</sub>R<sub>17-8</sub> =  $\alpha$ -OC(:O)CH<sub>2</sub>CH<sub>2</sub>- $\beta$ ; R<sub>17-9</sub> = H,  
C<sub>1</sub>-3-alkyl; R<sub>17-11</sub> = (CH<sub>2</sub>)<sub>1-2</sub>CH:CH<sub>2</sub>; R<sub>17-12</sub> = OH; R<sub>17-1-1</sub> = H,  
Si(R<sub>17-1-2</sub>)<sub>3</sub>; R<sub>17-1-2</sub> = C<sub>1</sub>-4-alkyl, CH(OEt)Me, THP], including an  
7 $\alpha$ -substituted steroid, and various novel processes which are used  
to prepare known intermediates useful in the production of eplerenone, a  
pharmaceutical agent. Thus, pregnadienone spirolactone II was prepared from  
 $\Delta^9$ -canrenone (III) via conjugate addition of 2-methylfuran in MeNO<sub>2</sub>  
containing BF<sub>3</sub>·OEt<sub>2</sub>, ring cleavage with dibromantin in aqueous THF containing  
KOAc, ozonolysis (O<sub>3</sub>/O<sub>2</sub>) in CH<sub>2</sub>Cl<sub>2</sub>/O<sub>2</sub>(CHMe<sub>2</sub>)<sub>2</sub> with Me<sub>2</sub>S quenching in CHCl<sub>3</sub>  
and oxidation in CHCl<sub>3</sub> with H<sub>2</sub>O<sub>2</sub> in H<sub>2</sub>O containing KHCO<sub>3</sub>.